

# SURFACE MOUNT THICK FILM RESISTOR NETWORKS RMG

LEADFREE  
RoHS Compliant

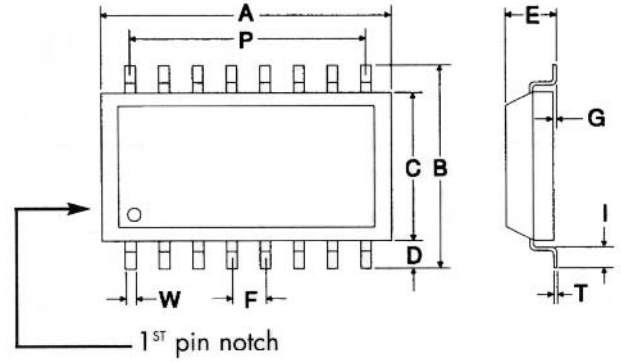
## RMG

### Features

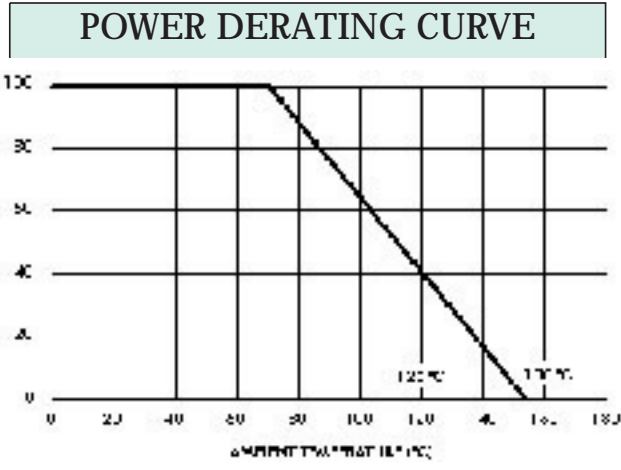
- MEGASTAR-OHM RMG Series utilize a high quality metal glazed resistive element sealed in a molded package.
- Thick film, small outline package
- 16 pins in A circuits types
- Suits high density mounting with only 1.27mm lead spacing.

### POWER DERATING CURVE

- For resistors operated in ambient temperatures above 70° C, power rating must be derated in accordance with the curve.



PERFORMANCE CHARACTERISTICS	
Electrical	RMG
Number of Terminals	16
Overall Power Rating (Watts)	1/2 @ 70°C
Maximum Working Voltage	50V
Resistance Temperature Coefficient	±200ppm/°C (D)
Resistance Range	33 - 2.2M
Tolerance %	±5(J), ±2(G)
Operating Temperature Range	-55°C to +125°C
Environmental	Per MIL-R-83401D
Moisture Resistance	±(1.0%+0.05 )
Thermal Shock	±(0.5%+0.05 )
Load Life	±(2.0%+0.05 )
Resistance to Soldering Heat	±(0.5%+0.05 )
Terminal Strength	±(0.5%+0.05 )
Dielectric Withstand Charge	±(0.5%+0.05 )
Short Time Overload	±(0.5%+0.05 )



SCHEMATICS				
Code (circuit type)	I-Isolated	P-Common	L-Ladder	D-Voltage Divider
Circuit Diagrams				
Element power rating (watts)	1/32 watt @ 70°C	1/32 watt @ 70°C	1/24 watt @ 70°C	1/24 watt @ 70°C
Overall power rating (watts)	1/2 watt @ 70°C	1/2 watt @ 70°C	1/2 watt @ 70°C	1/2 watt @ 70°C
		Also known as: Common or parallel type circuit	Applied voltage: 20Vdc max. Linearity: ±1/2 LSB Type: 4 to 8 bits	

## Part Numbering System

RMG	I	102	J	T																									
Product Type	Circuit Code	Nominal Resistance	Tolerance	Packaging																									
	<table border="1"> <thead> <tr> <th>Code</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>P</td> <td>Common</td> </tr> <tr> <td>D</td> <td>Voltage Divider</td> </tr> <tr> <td>I</td> <td>Isolated</td> </tr> <tr> <td>L</td> <td>Ladder</td> </tr> </tbody> </table>	Code	Details	P	Common	D	Voltage Divider	I	Isolated	L	Ladder	<table border="1"> <thead> <tr> <th>Code</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>G</td> <td>±2%</td> </tr> <tr> <td>J</td> <td>±5%</td> </tr> </tbody> </table>	Code	%	G	±2%	J	±5%	<table border="1"> <thead> <tr> <th>Code</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>T</td> <td>32mm paper tape (2000/reel)</td> </tr> <tr> <td>TE</td> <td>24mm plastic tape (2000/reel)</td> </tr> <tr> <td>M</td> <td>Magazine tube (40/tube)</td> </tr> <tr> <td>J</td> <td>J-hook terminals (gull wing)</td> </tr> </tbody> </table>	Code	Details	T	32mm paper tape (2000/reel)	TE	24mm plastic tape (2000/reel)	M	Magazine tube (40/tube)	J	J-hook terminals (gull wing)
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		3 digit code 2 first significant digits plus multiplier E24 (33 - 2.2M)																											

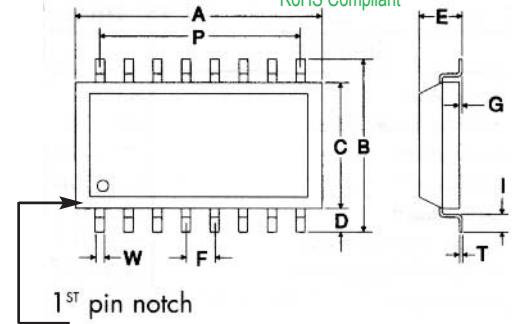


## RMT

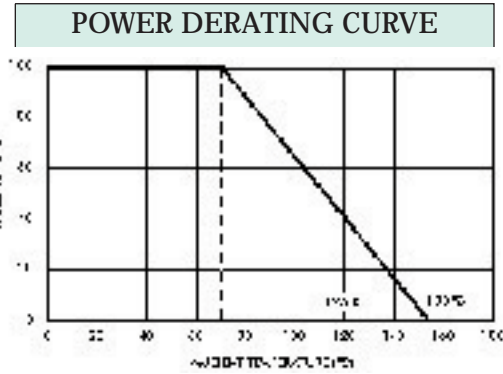
### Features

- MEGASTAR-OHM RMT Series use a sputtered tantalum alloy film to assure high stability and reliability through high temperature heat treatment.
- Suits high density mounting with only 1.27mm lead spacing.

LEADFREE  
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PERFORMANCE CHARACTERISTICS			
Electrical		RMT	
Number of Terminals	16		
Overall Power Rating (Watts)	1/2 @ 70°C		
Maximum Working Voltage	100V		
Resistance Temperature Coefficient	±100ppm/°C (K)	±50ppm/°C (C)	±25ppm/°C (E)
Resistance Range	47 - 100K	100 - 51K	100 - 51K
Tolerance %	±1(F), ±0.5(D), ±0.25(C)		
Operating Temperature Range	-55°C to +155°C		
Environmental		Per MIL-R-83401D	
Moisture Resistance	±(1.0%+0.05 )		
Thermal Shock	±(0.5%+0.05 )		
Load Life	±(1.0%+0.05 )		
Resistance to Soldering Heat	±(0.25%+0.05 )		
Terminal Strength	±(0.25%+0.05 )		
Dielectric Withstand Charge	±(0.25%+0.05 )		
Short Time Overload	±(0.25%+0.05 )		



SCHEMATICS		
Code (circuit type)	I-Isolated	P-Common
Circuit Diagrams		
Element power rating (watts)	1/32 watt @ 70°C	1/16 watt @ 70°C
Overall power rating (watts)	1/2 watt @ 70°C	1/2 watt @ 70°C

## Part Numbering System

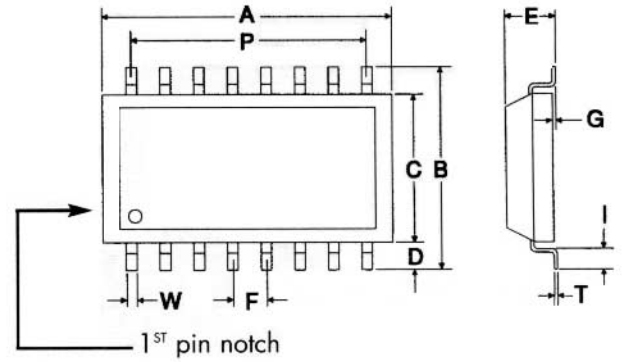
RMT	I	1002	C	F	T			
Product Type	Schematics		Resistance value		Temp. Coefficient	Tolerance	Packaging	
	Code	Details	Code	%	Code	T.C.	Code	%
	I	Isolated	47R0	47	T	±10ppm/°C	C	±0.25%
	P	Common	4751	4.75K	E	±25ppm/°C	D	±0.5%
			1002	10K	C	±50ppm/°C	F	±1%
			5112	51.1K	K	±100ppm/°C		
							T	
							TE	24mm plastic tape (2000/reel)
							M	Magazine tube (40/tube)
							J	J-hook terminals

# SURFACE MOUNT THICK & THIN FILM RESISTOR NETWORKS



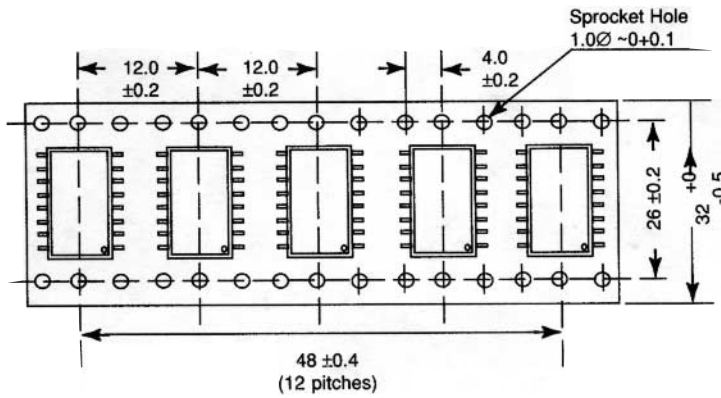
RMG, RMT

DIMENSIONS: Inches (mm)	
FEATURE	DIMENSIONS
A-Body Length	.43±.01 (11.0±0.2)
B-Lead Tip to Lead Tip	.30±.01 (7.7±0.2)
C-Body Width	.22(5.7) max.
D-Lead Length	.04±.004 (1.0±0.1)
E-Over Height	.07±.01 (1.7±0.2)
F-Lead to Lead Spacing	.05±.01 (1.27±0.2)
G-Body to PCB Spacing	.004±.002 (0.10±0.05)
I-Lead Footprint	.01 (0.3) min.
T-Lead Thickness	.006/.008 (0.15/0.20)
P-Lead to Lead Overall	.35±.01 (8.89±0.2)
W-Lead Width	.016 (0.4)

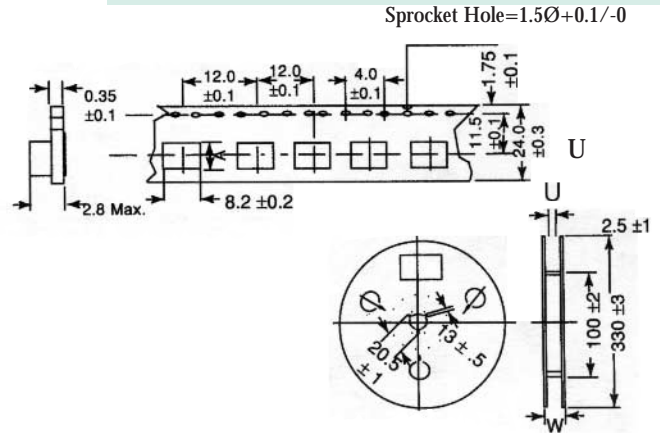


## PACKAGING INFORMATION: (in mm)

### 32mm Paper Tape (T)

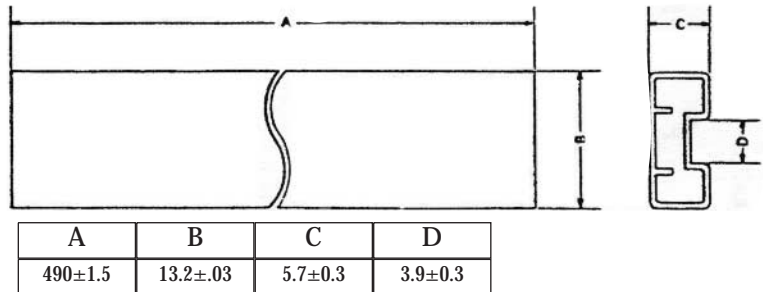


### 24mm Embossed Plastic Tape (TE)



Type of Paper	Dim. U	Q'ty per Reel
32mm Paper	34.0	2000 pcs.
24mm Plastic	24.5	2000 pcs.
Magazine Pack	-----	40/tube
Type	# pins	Dim. A=±0.2
RMG & RMT	16	11.7

### Magazine Tube (M)



## MARKING DETAILS

RMG Series	RMT Series
Example of P-Type circuit "common"	Example of I-Type circuit "isolated"